

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klebe et al. (4,503,092) and Schutte et al. (DE 1,163,784) in view of Belligoi et al. (US 6,103,004).

With respect to claims 1-12, Klebe et al. discloses an apparatus for the hydrophobization of pyrogenically produced silica comprising: a means for pyrolyzing/burner (1) to form silica; a coagulation zone/means for agglomerating, (2); a series of cyclones (4, 5, 6); a fluidization vessel (11) which can hydrophobize and deacidify (col. 3, lines 35- 36); and a second cyclone (8) connected to an output (13) of the fluidization vessel (11); and a conduit network extending between the second cyclone (8) and the deacidifying section (inside vessel (11)) or the device for removing halogen gas, the conduit network providing a flow path for returning hydrophobic silica collected by the second cyclone and/or the second filter to the deacidifying section or the device for removing halogen gas (as illustrated).

Klebe et al. has incorporated by reference the Schutte et al. patent.

Schutte et al. discloses wherein the deacidification and hydrophobization can take place in separate zones as well as in a single zone (col. 3, lines 54-60). Therefore, it is disclosed that it is known in the art that the hydrophobizing and deacidifying can be divided; and thereby, it would be obvious and inherent that the

deacidification and hydrophobization zones are in fluid communication with one another.

Klebe et al. fails to disclose wherein the apparatus also comprises filters. Belligoi et al. teaches that pyrogenically prepared silica (col. 1, lines 19-23) can be separated from solids using a cyclone followed by a filter (col. 2, lines 33-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to also provide filters along with the cyclones in the device of Klebe et al. in order to achieve a desired level of separation as well as since filters are recognized by Belligoi et al. as a known separation means for pyrogenically prepared silica. Although the recitations of operational temperatures and velocities continue to be directed to a manner of operating the claimed device, and thus amount recitations of intended use (the manner of operating a device does not differentiate apparatus claims from the prior art; MPEP 2114), Schutte et al. further discloses operating temperatures of the device of 200°C to 800°C, especially 400°C-600°C (col. 3, line 48- col. 4, line 5) and velocities of about 2.0 cm/sec (col. 7, lines 26-36).

With respect to claims 1-12, claims describe operational conditions and do not limit the invented apparatus. While features of an apparatus may be recited either structurally or functionally, claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997), see also *In re Swinehad*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); *In re Danly*,

263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "Apparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). MPEP 2114.

Response to Arguments

Prior Art rejection

1. Applicant's arguments filed 7/28/2008 have been fully considered but they are not persuasive.

Applicant argues the following:

A. On page 3 of the Remarks, Applicant argues: that the combination of references does not teach the instant apparatus as follows:

"...However, US 3924029 (Schutte et al.) states in column 3, lines 46-51, "It is particularly advantageous that the deacidification and the dehydration treatment do not necessarily have to take place in separate zones. The reaction conditions for the surface treatment are such that deacidification and dehydration can take place simultaneously." Thus, Schutte offers a recommendation that the deacidification and dehydration treatment be simultaneously conducted.

Accordingly, if the teachings in Klebe, Schutte and Belligoi were combined, one of ordinary skill in the art would understand that *conducting the hydrophobizing treatment and the acidifying treatment simultaneously is advantageous or has at least the same effect as compared with conducting the deacidifying treatment separately from the hydrophobizing treatment..*"

Examiner respectfully disagrees. The disclosure made by Schutte et al. as referenced in Klebe suggests that it is known in the art that the deacidification and hydrophobization can take place in separate zones as well as in a single zone (col. 4, lines 54-60) and, therefore, it is disclosed that the hydrophobizing and deacidifying can be divided. As to whether one skilled in the art would choose to

separate the two zones after reading the prior art of Schulte over otherwise, one skilled in the art would choose perhaps to try either way since Schulte does not provide a clear assertion that separating the two zones is not advantageous, and similarly, Schulte does not emphasize that combining the two zones is far more advantageous than separating them. Please note the language used by Schulte as underlined above.

B. Applicant presented a Declaration demonstrating test results in support of applicant's arguments that separating the hydrophobizing and the deacidification zones provides higher product yields. Examiner respectfully points out that the declaration is not commensurate in scope with the instant claims, as there could be other unidentified and/or excluded factors which influence the test results. Furthermore, the test conditions related to operating the instant apparatus with the two zones combined, as described in the declaration, when compared to those presented in the instant specification under example 1, one can realize that the conditions are not exactly the same (ex. temperature, acidity, nitrogen federate).

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAITY V. HANDAL whose telephone number is (571)272-8520. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on (571) 272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. V. H./
Examiner, Art Unit 1795

10/16/08

/Alexa D. Neckel/
Supervisory Patent Examiner, Art Unit 1795